TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

June 30, 2005

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor

THRU: Jim Smith, Team Lead

FROM: Joe Helfrich, biology, Big Game Species

RE: Amendment of Volume 11, North Rilda Area, Pacificorp, Energy West Mining

Company, Deer Creek Mine, C/015/0018, Task #2266

SUMMARY:

On December 17, 2004 the Division received an application to amend the Deer Creek mining and reclamation plan. On April 1, 2005 the Division received the Applicant's response to the Division's deficiency letter dated March 1, 2005. On June 2nd the Division received the applicant's response to the Division's deficiency letter dated May 10, 2005. The application includes a plan to develop a 12acre parcel and install two portals in Rilda Canyon. The area is approximately 12 miles up Huntington Canyon from the town of Huntington. The area can be located on the Rilda Canyon 7.5 minute U. S. G. S. quadrangle map SW1/4NE1/4, section 29, T.16S. R.7E. This memo will include a review of the Biology section of the regulations with the emphasis on Big Game species.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

FISH AND WILDLIFE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.21; R645-301-322.

Analysis:

The Biology section for this application is included in chapter three of volume 11. Big Game and other species are listed on page 8, table 300-3 (Other Wildlife Species of Consideration). They include Mule Deer, Rocky Mountain Elk, Mountain Lion, Black Bear, Wolverine, Golden Eagle and Macroinvertebrates. The table also includes a listing of species habitat association and Rilda habitat information for each species. Mule Deer, Elk and Moose habitats are delineated on maps 300-3, 4 and 5 respectively. Their habitats are also common to the proposed disturbed area. The entire Rilda Canyon area is noted as habitat for Mountain Lion and Black Bear. Wolverine and Lynx habitats are referenced to a web site map created by the Division of Wildlife Resources. Their habitats being common to the Rilda Canyon area.

Additional big game information can be found on page 11, paragraph 4 under II. Terrestrial Species with references to big game habitat maps. The application includes an operation plan that outlines a protection and mitigation plan for wildlife species common to the proposed development area, pages 16-19. The reclamation plan also addresses protection of fish and wildlife on page 24.

Findings:

The information provided in the application is adequate to meet the requirements of this section of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

The application includes vegetation and habitat maps for the big game species common to the proposed Rilda Canyon development area. Chapter three, page 11 paragraph 4 of the application states that "Mule Deer, Elk and Moose habitats have been mapped for the permit and adjacent areas". Page 16 paragraph three also includes a reference to the Big game species maps. These maps were incorrectly referenced as 300-2, 3 and 4. They have been revised to indicate that the Deer, Elk and Moose habitat are located on maps 300-3, 4 and 5. Map 300-6 shows the approximate location of the 4,000 tons of buried coal to be removed and landscape enhancement areas. Map 200-2 identifies the soil stripping and buried coal test areas. These maps are referenced in table 300-5 of the Biology section on pages 19 and 20 in the Project section. The maps also include the size and location of the proposed 13.1acre disturbance.

Findings:

The information provided in the application is adequate to meet the requirements of this section of the regulations.

OPERATION PLAN

FISH AND WILDLIFE INFORMATION

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

Analysis:

Protection and Enhancement Plan

The application includes an operation plan located in volume 11 chapter three, pages 16 through 19. Within that plan the permittee has included "methods, devices, and procedures to protect fish, wildlife and stream degradation during construction and operation activities". With regard to the first method, (Reduced disturbed footprint), Map 500-1 has been revised to reflect the locations and acreages of the 4.4 acres of pre disturbed areas. As noted in this section of the application the pre disturbed areas were reclaimed in 1988. The areas were topsoiled, recontoured and seeded. Since the vegetation is established and the areas are considered critical winter habitat for deer and elk there would not be a reduction in the disturbed area footprint. However 4.4 acres or 33.6% of the proposed disturbed 13.1 acres would be considered pre disturbed reclaimed land. As noted in the previous review, this method would not qualify as a procedure to protect fish, wildlife and steram degredation during construction and operation

activities. Additional protection procedures for Big Game species include #5. "Buffer Zone markers placed along the south disturbed border to make construction workers aware of the location of the stream. #6. Reduced speed limit on the mine access road." #11. Indicates that the facilities will be located below the stream crossing at the forks of Rilda Canyon to allow Big Game access from one fork of Rilda Canyon to the other. #12. "Material haulage to the existing Rilda Canyon Fan will be discontinued". #14 Reclamation activities will not take place between December 1st and April 15th. This measure also includes construction activities.

Additional wildlife mitigation commitments for Big Game species are provided for in table 300-5, they include;

- 1.For the Leroy mine area; buried coal removal and landscape enhancement. The site was reclaimed by the Abandoned Mine Lands section of the Division of Oil Gas and Mining in 1988. The removal of the additional buried coal outside the disturbed area will be enhanced for wintering big game species throughout the life of the facility. These areas will be enhanced during the construction of the surface facilities.
- 2. For the AML areas outside the proposed disturbed area. The permittee proposes to cooperate with the AML and Forest Service to reclaim and enhance the Leroy Mine area. The project will include DOGM and the USFS as overseeing agencies with implementation and completion to be accomplished within two years.
- 3. For the aspen regeneration in Meetinghouse Canyon, the permittee has proposed to cooperate with the Division of Wildlife Resources, (DWR), in a timber harvest and aspen regeneration on 200 acres of private land. The project will include DWR as the overseeing agency with implementation and completion to be accomplished within two years. DOGM and the USFS will be apraised of the progress of the project.
- 4. For the 4,440 acres of privately owned lands on East Mountain the application indicates that the land will be managed for multiple use and protected through out the life of the mine. There is an area where the conifers have been subject to beetle kill. The permittee plans to enhance this area in cooperation with the Forest Service by removing the beetle killed trees.

For protection of Big Game species the Permittee also commits to conducting construction activities during months that would minimize impacts to breeding and birthing activities. The plan should also specify that construction activities would not interfere with the activities of deer and elk during periods of high stress, such as when the animals are utilizing the same area from early winter through late spring. Exclusionary periods for elk and deer should specify that the wintering period is from December 1 through April 15, and calving period is from May 15 through July 5.

Wetlands and Habitats of Unusually High Value for Fish and Wildlife

The proposed disturbed area will be located in Critical Deer and Elk winter range including some riparian areas. These would be considered habitats of unusually high value for these species of wildlife. The proposed disturbed area will potentially impact 13.1 acres of deer and elk critical winter range. According to estimates from Terry Nelson, (Wildlife Biologist for the Manti La-Sal National Forest), approximately 1148 acres of critical deer and elk winter range would be potentially impacted by the development of the surface facilities and increased traffic along the road. The estimate is based on a .5mile corridor of displacement along the road and around the proposed disturbed area that is scaled down using topographic features. The Forest Service typically requires 3 acres of mitigation for each acre impacted. These figures and acreages as represented by the Forest Service and Division of Wildlife Resources may not be specifically required by the Division in the review and approval of the applicant's protection and enhancement plan. Volume 11, Pages 300-16 through 25 of the application for the proposed Rilda Canyon development area include fifteen protection methods and five descriptions of proposals for protection and enhancement of big game species. The findings are enumerated in the Protection and Enhancement Plan section of this review.

Findings:

The information provided in the application is adequate to meet the requirements of this section of the regulations.

RECLAMATION PLAN

PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES

Regulatory Reference: 30 CFR Sec. 817.97; R645-301-333, -301-342, -301-358.

Analysis:

Wildlife protection measures during reclamation are described in Volume 11 chapter three, section R645-301-342 page 26. The application includes an exclusionary period during the reclamation of the site. The plan specifies that reclamation activities would not interfere with the activities of deer and elk during periods of high stress, such as when the animals are utilizing the area from early winter through late spring. Exclusionary periods for elk and deer specify that the wintering period is from December 1 through April 15.

Findings:

The information provided in the application is adequate to meet the requirements of this section of the regulations.

RECOMMENDATIONS:

The application is recommended for approval.

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